

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Withdrawn) A method for the analysis of samples in connection with acute cardiovascular diseases, comprising:
 - (a) obtaining a biological sample to be analysed;
 - (b) determining the concentration of at least one marker selected from soluble CD40-ligand (sCD40L), PAPP-A, and PIGF;
 - (c) optionally, determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, and inflammatory markers; and
 - (d) comparing the results obtained for said biological sample with at least one reference sample.
2. (Withdrawn) The method according to claim 1, wherein at least one of the sample to be analysed and the reference sample is derived from a human.
3. (Withdrawn) The method according to claim 1, wherein the sample to be analysed is selected from the group consisting of peripheral blood or fractions thereof, and cell culture suspensions or fractions thereof.
4. (Withdrawn) The method according to claim 3, wherein the sample to be analysed is blood plasma.

5. (Withdrawn) The method according to claim 3, wherein a coagulation inhibitor is added to the peripheral blood.
6. (Withdrawn) The method according to claim 1, wherein the inflammatory markers are selected from CRP, (hs)CRP, and IL-10.
7. (Withdrawn) The method according to claim 1, wherein the markers and combinations thereof are selected from sCD40L; PAPP-A; PIGF; sCD40L + TnT; PAPP-A + TnT; PIGF + TnT; sCD40L + PAPP-A; sCD40L + PIGF; PAPP-A + PIGF; sCD40L + PAPP-A + TnT; sCD40L + PIGF + TnT; PAPP-A + PIGF + TnT; sCD40L + PAPP-A + PIGF; and sCD40L + PAPP-A + PIGF + TnT.
8. (Withdrawn) The method according to claim 7, further comprising determining the concentration of at least one of the markers MPO, NT-proBNP, BNP, CRP, (hs)CRP, and IL-10.
9. (Withdrawn) The method according to claim 1, wherein the markers and combinations thereof are selected from CRP, TnT, PAPP-A; CRP, TnT, PAPP-A, IL-10; CRP, TnT, PAPP-A, IL-10, sCD40L, and TnT, PAPP-A, IL-10, sCD40L, VEGF.
10. (Withdrawn) The method according to claim 1, wherein the concentration of the at least one marker is determined by means of an immunological method by means of marker-binding molecules.
11. (Withdrawn) The method according to claim 10, wherein said marker-binding molecules are selected from the group consisting of anti-marker-antibodies or parts thereof, and marker-receptors or parts thereof.

12. (Withdrawn) The method according to claim 11, wherein said antibodies, or parts thereof are polyclonal antibodies, monoclonal antibodies, Fab-fragments, scFv-fragments, or diabodies.

13. (Withdrawn) The method according to claim 11, wherein said at least one marker or said marker-binding molecules are present in solution or are matrix-immobilised.

14. (Withdrawn) The method according to claim 11, wherein said marker-binding molecules bind to sCD40L and are coupled to one or several detection groups selected from the group consisting of fluoresceinthioisocyanate, phycoerythrine, an enzyme, and magnetic beads.

15. (Withdrawn) The method according to claim 11, wherein said marker-binding molecules are detected with an antibody to which one or several detection groups are coupled.

16. (Withdrawn) The method according to claim 10, wherein the immunological methods are selected from the group consisting of sandwich-enzyme-immunoassays, ELISA, and solid phase immunoassays.

17. (Withdrawn) The method according to claim 1, wherein said cardiovascular diseases are selected from the group consisting of unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

18. (Withdrawn) A diagnostic kit, comprising means for performing the method according to claim 1, optionally together with additional components or excipients.

19. (Withdrawn) The diagnostic kit according to claim 18, comprising gold labelled polyclonal mouse-indicator antibodies, biotinylated polyclonal detection antibodies and a testing device, wherein said testing device comprises a fiberglass-fleece.

20. (Currently Amended) A method for the monitoring of therapy of acute cardiovascular disease comprising:

- (a) obtaining a biological sample to be analysed;
- (b) determining the concentration of at least one inflammatory marker selected from soluble CD40-ligand (sCD40L), PAPP-A, and PIGF;
- (c) optionally, determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, and inflammatory markers;
- (d) comparing the results obtained for said biological sample with at least one reference sample; and
- (e) monitoring the therapy of an acute cardiovascular disease to detect an improvement or lack thereof in a pathophysiological condition, as indicated by a change in the concentration of the at least one inflammatory marker;
- (f) adjusting the therapy of an acute cardiovascular disease, if necessary, in light of the improvement or lack thereof detected in (e).

21. (Previously Presented) The method according to claim 20, wherein said therapy comprises the administration of at least one of statins and inhibitors of the glycoprotein IIb/III-receptor.

22. (Withdrawn) The method according to claim 5, wherein the coagulation inhibitor is heparin.

23. (Previously Presented) The method of claim 20, wherein the cardiovascular disease is chosen from unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

24. (Previously Presented) The method of claim 20, wherein the therapy is monitored for a period of 6 months from the start of the therapy.

25. (Currently Amended) A method for determining the prognosis of acute cardiovascular disease comprising:

- (a) obtaining a biological sample to be analysed;
- (b) determining the concentration of ~~at least one inflammatory marker selected from PAPP-A and PIGF;~~
- (c) optionally, determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, and inflammatory markers;
- (d) comparing the results obtained for said biological sample with at least one reference sample; and
- (e) determining the prognosis of an acute cardiovascular disease.

26. (Previously Presented) The method of claim 25, wherein the cardiovascular disease is chosen from unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

27. (Previously Presented) A method for diagnosing acute cardiovascular disease comprising:

- (a) obtaining a biological sample to be analysed;
- (b) determining the concentration of PIGF;
- (c) optionally, determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, PAPP-A and inflammatory markers;
- (d) comparing the results obtained for said biological sample with at least one reference sample; and
- (e) diagnosing an acute cardiovascular disease.

28. (Previously Presented) The method of claim 27, wherein the cardiovascular disease is chosen from unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

29. (Currently Amended) A method for determining the prognosis of acute cardiovascular disease comprising:

- (a) obtaining a biological sample to be analysed;
- (b) determining the concentration of at least one inflammatory marker selected from PAPP-A and soluble CD40-ligand (sCD40L);

(c) determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, ~~PAPP-A~~, PIGF, and inflammatory markers;

(d) comparing the results obtained for said biological sample with at least one reference sample; and

(e) determining the prognosis of an acute cardiovascular disease.

30. (Previously Presented) The method of claim 29, wherein the cardiovascular disease is chosen from unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.

31. (Currently Amended) A method for diagnosing acute cardiovascular disease comprising:

(a) obtaining a biological sample to be analysed;

(b) determining the concentration of at least one inflammatory marker selected from PAPP-A and soluble CD40-ligand (sCD40L);

(c) determining the concentration of at least one additional marker selected from troponin T (TnT), MPO, NT-proBNP, VEGF, BNP, ~~PAPP-A~~, PIGF, and inflammatory markers;

(d) comparing the results obtained for said biological sample with at least one reference sample; and

(e) diagnosing an acute cardiovascular disease.

32. (Previously Presented) The method of claim 31, wherein the cardiovascular disease is chosen from unstable angina, myocardial infarction, acute coronary syndromes, coronary arterial disease, and heart insufficiency.